

Orono Middle School and High School)	Departmental
Orono School Dept)	Findings of Fact and Order
Penobscot County)	Air Emission License
Orono, Maine		
A-109-71-F-R		

After review of the air emissions license renewal application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Orono School Dept. has applied to renew their Air Emission License, permitting the operation of emission sources associated with four boilers used for facility heating purposes.

B. Emission Equipment

Orono School Dept. is authorized to operate the following air emissions units:

Fuel Burning Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Stack #</u>
Boiler #1	2.6	29	#2 fuel oil, 0.5%	1
Boiler #2	2.7	28	#2 fuel oil, 0.5%	1
Boiler #3	2.2	25	#2 fuel oil, 0.5%	2
Boiler #4	2.6	29	#2 fuel oil, 0.5%	2

Note: Stack #1 has a height of 39' 6" and stack #2 has a height of 21'.

C. Application Classification

The application for Orono School Department does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of current licensed emission units only.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Department regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Boilers #1,2,3 and 4

Orono School Dept. operates four boilers, Boilers #1 and 2 at Orono High School and Boilers #3 and 4 at Orono Middle School, primarily for facility hot water and heating needs. The four boilers have a total maximum design heat input capacity of 10.1 MMBtu/hr, firing #2 oil with a maximum sulfur content not to exceed 0.5% by weight.

A summary of the BPT analysis for boilers #1 (2.6 MMBtu/hr), #2 (2.7 MMBtu/hr), #3 (2.2 MMBtu/hr) and #4(2.6 MMBtu/hr) is as follows:

1. Chapter 106 regulates fuel sulfur content.
2. The PM/PM₁₀ limits are derived from Chapter 103.
3. NO_x emission limits are based on data from similar #2 fired boilers of this size and age.
4. CO and VOC emission limits are based upon AP-42 data dated 9/98.
5. Visible emissions from the boilers are subject to chapter 101 of the Air Regulations:
Visible emissions from any stack shall not exceed 20% opacity on a six- (6) minute block average except, for no more than 2 six minute block averages in a 3 hour period.

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C. Annual Emission Restrictions

Orono School Department shall be restricted to the following annual emissions, based on a 12 month rolling total:

- The total fuel use for the facility shall not exceed 100,000 gal/yr. of #2 fuel oil with a maximum sulfur content not to exceed 0.5% by weight.

Total Allowable Annual Emission for the Facility
(used to calculate the annual license fee)

<u>Pollutant</u>	<u>Tons/Year</u>
PM	0.8
PM ₁₀	0.8
SO ₂	4.0
NO _x	3.5
CO	0.3
VOC	0.02

III. AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Based on the above total facility emissions, Orono School Department is below the emissions level required for modeling and monitoring.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-109-71-F-R subject to the following conditions:

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (Title 38 MRSA §347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115.
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both.
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request.
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353.
- (6) The license does not convey any property rights of any sort, or any exclusive privilege.
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions.

- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request.
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license.
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license.
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
- (i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - a. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - b. pursuant to any other requirement of this license to perform stack testing.
 - (ii) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - (iii) submit a written report to the Department within thirty (30) days from date of test completion.
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

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- (i) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - (ii) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - (iii) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day; whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation.
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.

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SPECIFIC CONDITIONS

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(16) Boilers #1, 2, 3 and 4

A. Fuel use shall not exceed 100,000 gals/yr. #2 fuel oil with a maximum sulfur content of 0.5% by weight based on a 12 month rolling total. Fuel use records, consisting of fuel delivery receipts demonstrating percent sulfur content, shall be maintained on a monthly basis, in addition to the 12-month rolling total.

B. Emissions shall not exceed the following:

Equipment		PM/PM ₁₀	SO ₂	NO _x	CO	VOC
Boiler #1	lb/hr	0.3/0.3	1.5	1.3	0.1	0.01
Boiler #2	lb/hr	0.3/0.3	1.5	1.4	0.1	0.01
Boiler #3	lb/hr	0.3/0.3	1.2	1.1	0.1	0.01
Boiler #4	lb/hr	0.3/0.3	1.5	1.3	0.1	0.01

Compliance shall be demonstrated through stack testing in accordance with the appropriate method found in 40 CFR Part 60, Appendix A.

C. Visible emissions.

Visible emissions from Stack 1 shall not exceed 20% opacity on a six-(6) minute block average except, for no more than 2 six minute block averages in a 3-hour period.

Visible emissions from Stack 2 shall not exceed 20% opacity on a six- (6) minute block average except, for no more than 2 six-minute block averages in a 3 hour period.

(17) Orono School Department shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (Title 38 MRSA §605-C).

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(18) The term of this Order shall be for five (5) years from the signature below.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2002.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
MARTHA G. KIRKPATRICK, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: January 24, 2002

Date of application acceptance: February 6, 2002

Date filed with the Board of Environmental Protection: _____

This Order prepared by, Peter G. Carleton, Bureau of Air Quality